

WHAT IS CLAIMED IS:

1. A capsule medical apparatus for medical actions such as examination and treatment in the body, the capsule medical apparatus comprising:

a detecting device which detects whether the capsule medical apparatus is just being evacuated from the body or it has already been evacuated; and

a notifying device which extracorporeally notifies the detecting result in association with the detecting device.

2. A capsule medical apparatus for medical actions such as the examination and treatment in the body, the capsule medical apparatus comprising:

a detecting device which detects that the capsule medical apparatus is extracorporeally evacuated; and

a notifying device which externally notifies the extracorporeal evacuation in association with the detecting device.

3. A capsule medical apparatus according to Claim 2, wherein the notifying device is a sound generating device which is arranged to the capsule medical apparatus.

4. A capsule medical apparatus according to Claim 2,

wherein the notifying device is a light emitting device which is arranged to the capsule medical apparatus.

5. A capsule medical apparatus according to Claim 2, wherein the notifying device is a vibrating device which is arranged to the capsule medical apparatus.

6. A capsule medical apparatus according to Claim 2, wherein the device for notifying the extracorporeal evacuation is operated in association with a timer arranged to the capsule medical apparatus.

7. A capsule medical apparatus according to Claim 2, wherein in association with the operation of the device for notifying the extracorporeal evacuation, at least one of other functions is stopped.

8. A capsule medical apparatus according to Claim 2, wherein the device for notifying the extracorporeal evacuation is a pressure sensor arranged to the capsule medical apparatus.

9. A capsule medical apparatus according to Claim 2, wherein the device for detecting the extracorporeal evacuation is a temperature sensor arranged to the capsule

medical apparatus.

10. A capsule medical apparatus according to Claim 2, wherein the device for detecting the extracorporeal evacuation is a pH sensor arranged to the capsule medical apparatus.

11. A capsule medical apparatus according to Claim 2, wherein the device for detecting the extracorporeal evacuation is an optical sensor arranged to the capsule medical apparatus.

12. A capsule medical apparatus according to Claim 2, further comprising:

an image pick-up element for capturing an image;

an illuminating device for illuminating a photographing target; and

an optical sensor for detecting the extracorporeal evacuation,

wherein the optical sensor is shared with the image pick-up element.

13. A capsule medical apparatus according to Claim 2, further comprising:

an image pick-up element for capturing an image;

an illuminating device for illuminating a photographing target; and

a light emitting device for notifying the extracorporeal evacuation;

wherein the light emitting device is shared with an illuminating device for photographing an image.

14. A capsule medical apparatus for medical actions such as examination and treatment in the body, the capsule medical apparatus comprising:

a detecting device for detecting the completion of the set medical action;

a notifying device for externally notifying the extracorporeal evacuation in association with the detecting device.

15. A capsule medical apparatus according to Claim 14, wherein the notifying device is a sound generating device arranged to the capsule medical apparatus.

16. A capsule medical apparatus according to Claim 14, wherein the notifying device is a light emitting device arranged to the capsule medical apparatus.

17. A capsule medical apparatus according to Claim 14,

wherein the notifying device is a vibrating device arranged to the capsule medical apparatus.

18. A capsule medical apparatus for medical actions such as examination and treatment in the body, the capsule medical apparatus comprising

a notifying device which externally notifies the extracorporeal evacuation,

wherein the capsule medical apparatus is provided with:

an operating mode for the medical action; and

a standby mode for stopping an examining and treating function after completing the medical action, and

the notifying device is operated in the standby mode.

19. A capsule medical apparatus for medical actions such as examination and treatment in the body, wherein the capsule medical apparatus is operated in:

an operating mode for the medical action; and

an extracorporeal detecting mode for detecting that the capsule medical apparatus is extracorporeally evacuated.

20. A capsule medical apparatus according to Claim 19, wherein upon detecting that the capsule medical apparatus is extracorporeally evacuated in the extracorporeal detecting mode, a notifying device performs the notification.

21. A capsule medical apparatus according to Claim 19, wherein the operating times of the extracorporeal detecting mode can be set for change.

22. A capsule medical apparatus for medical actions such as examination and treatment in the body, wherein the capsule medical apparatus is operated in:

an operating mode for the medical action;

a notifying mode for notifying that the capsule medical apparatus is extracorporeally evacuated.

23. A capsule medical apparatus according to Claim 22, wherein the notifying mode has a notifying function in the case of substantially evacuating the capsule medical apparatus to the body outside.

24. A capsule medical apparatus according to Claim 22, wherein the operating times of the operating mode and the notifying mode can be set for change.

25. A capsule medical apparatus for passing a capsule casing through the living body and detecting in-vivo information, the capsule medical apparatus comprising in the casing:

a detecting device for extracorporeally detecting position specifying information indicating the position of the casing;

a determining device for determining based on the position specifying information detected by the detecting device whether or not the casing is positioned in the large intestine; and

a notifying device for extracorporeally outputting a notifying signal when the determining device determines that the casing is positioned in the large intestine.

26. A capsule medical apparatus according to Claim 25, wherein the position specifying information is extracorporeally supplied.

27. A capsule medical apparatus collecting system having a capsule medical apparatus for passing a capsule casing through the living body and for detecting living body information and an extracorporeal device extracorporeally arranged, the capsule medical apparatus comprising in the casing:

a detecting device for detecting position specifying information indicating the position of the casing that is extracorporeally supplied;

a determining device for determining based on the

position specifying information detected by the detecting device whether or not the casing is positioned in the large intestine; and

a notifying device for extracorporeally outputting a notifying signal when the determining device determines that the capsule casing is positioned in the large intestine, and the extracorporeal device comprising:

a supply device for supplying the position specifying information;

a receiving device for receiving the notifying signal; and

an output device for outputting sensible information based on the notifying signal.

28. A capsule medical apparatus collecting system according to Claim 27, wherein the position specifying information is electric waves.

29. A capsule medical apparatus collecting system according to Claim 27, wherein the position specifying information is sound waves.

30. A capsule medical apparatus collecting system according to Claim 27, wherein the position specifying information is magnetic field.



31. A capsule medical apparatus collecting system according to Claim 27, wherein the position specifying information is strong light.

32. A capsule medical apparatus collecting system according to Claim 25, wherein the position specifying information is the physical quantity obtained in the large intestine in the living body.

33. A capsule medical apparatus collecting system having a capsule medical apparatus for passing a capsule casing through the living body and for detecting living body information and an extracorporeal device extracorporeally arranged, the capsule medical apparatus comprising in the casing:

a detecting device for detecting, as position specifying information, the physical quantity obtained in the large intestine in the living body;

a determining device for determining based on the position specifying information detected by the detecting device whether or not the casing is positioned in the large intestine; and

a notifying device for extracorporeally outputting a notifying signal when the determining device determines that

the capsule casing is positioned in the large intestine, and

the extracorporeal device comprising:

a receiving device for receiving the notifying signal;

and

an output device for outputting sensible information based on the notifying signal.

34. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is a pH value characteristic of the large intestine.

35. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is the presence or absence and the amount of a characteristic material.

36. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is the presence or absence and the amount of microscopic organisms characteristic of the large intestine.

37. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is the concentration of marsh gas characteristic of the large intestine.

38. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is a pressure value characteristic of the large intestine.

39. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is the impedance characteristic of the large intestine.

40. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is color characteristic of the large intestine.

41. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is sound characteristic of the large intestine.

42. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is temperature characteristic of the large intestine.

43. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is the presence or absence and the amount of gene characteristic of the large intestine.

44. A capsule medical apparatus collecting system according to Claim 33, wherein the physical quantity is an enzyme characteristic of the large intestine.

45. A capsule medical apparatus collecting system comprising:

a capsule medical apparatus comprising a capsule casing and a transmitting device arranged in the capsule casing, the transmitting device for transmitting position specifying information detectable outside the casing, the capsule medical apparatus for detecting in-vivo information by the passage through the living body; and

an extracorporeal device extracorporeally arranged, the extracorporeal device comprising a receiving device extracorporeally arranged, for receiving the position specifying information, a determining device for determining based on the position specifying information received by the receiving device whether or not the capsule medical apparatus is positioned in the large intestine, and an output device for outputting sensible information when the determining device determines that the capsule medical apparatus is positioned in the large intestine.

46. A capsule medical apparatus collecting system

according to Claim 45, wherein the position specifying information is electric waves.

47. A capsule medical apparatus collecting system according to Claim 45, wherein the position specifying information is electric waves generated from a radio IC chip.

48. A capsule medical apparatus collecting system according to Claim 45, wherein the position specifying information is sound waves.

49. A capsule medical apparatus collecting system according to Claim 45, wherein the position specifying information is magnetic field.

50. A capsule medical apparatus collecting system according to Claim 45, wherein the position specifying information is strong light.

51. A capsule medical apparatus collecting system according to Claim 45, wherein the transmitting device is a radio IC chip which can read and write information as well as the position specifying information to and from the extracorporeal device.

52. A capsule medical apparatus collecting system according to Claim 51, wherein an ID can be registered to the radio IC chip.